ECS/EMD Configuration Change Request

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1. Originator Robert Cole	2. Log Date: **10/21/03**	3. CCR #: **03-0712**	4. Rev: —	5. Tel: 301.925.0799	6. Rm #: 3109F	7. Org. SE/HW

8. CCR Title: Update kernel and gigabit ethernet patches on g0sas01 and g0dps01

9. Originator Signature/Date **Robert Cole /s/ 10/21/03**	10. Class **II**	11. Type: **CCR**	12. Need Date: 10/27/03

13. CCR Sponsor Signature/Date **Byron Peters /s/ 10/21/03**	14. Category of Change: Update ECS/EMD Baseline Doc	15. Priority: (If "Emergency" fill in Block 27). Routine

16. Documentation/Drawings Impacted *(Review and submit checklist):*
911-TDA-011

17. Schedule Impact:

18. CI(s) Affected:DPL

19. Release Affected by this Change:

20. Date due to Customer:

21. Estimated Cost:
None - Under 100K

22. Source Reference: ☒NCR (attach) ☐Action Item ☐Tech Ref. ☐GSFC ☐Other:
ECSed38447

23. Problem: (use additional Sheets if necessary)

See next page.

24. Proposed Solution: (use additional sheets if necessary)
see next page

25. Alternate Solution: (use additional sheets if necessary)
Take no action and continue to experience data corruption which could possibly have been avoided.

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
An opportunity to prevent further data corruption in the GES DAAC data pool could be missed.

27. Justification for Emergency (If Block 15 is "Emergency"):

28. Site(s) Affected: ☐EDF ☐PVC ☐VATC ☐EDC ☒GSFC ☐LaRC ☐NSIDC ☐SMC ☐AK ☐JPL
☐EOC ☐IDG Test Cell ☐Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. SCDV CCB Chair (Sign/Date):
Byron V. Peters /s/ 10/23/03
Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS

33. EDF CCB Chair (Sign/Date):
Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS

34. ECS CCB Chair (Sign/Date):
Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS

CM01JA00 Revised 10/2/03   ECS/EDF/SCDV

ADDITIONAL SHEET

CCR #:   03-0712   Rev: — Originator:

Telephone: Office:

Title of Change:

Problem:

Currently GES DAAC is experiencing ongoing data corruption in the data pool. Some of these corrupt files have escaped detection by the custom code checksum verification process. There is a significant correlation between the times of occurence of a large number of corrupt files on 10/02/03 and input errors on the gigabit ethernet interface as reported by netstat. Previous conversations with Sun regarding interface errors during unrelated problems resulted in the recommendation to upgrade to newer versions of nfs, ethernet, and kernel patches. Although it is not known that updating these patches will fix the problem, the strong correlation suggests that old patches may be a contributing factor and hence upgrade of these patches at GSFC could reduce the severity of the problem.

Solution:

Install the following patches on g0sas01 and g0dps01.

108528-23: SunOS 5.8: kernel update patch (108528-23.zip)
108813-15: SunOS 5.8: Sun Gigabit Ethernet 3.0 (108813-15.zip)
108727-25: SunOS 5.8: /kernel/fs/nfs and /kernel/fs/sparcv9/nfs patch (108727-25.zip)

To install each patch, uncompress the file using the "unzip" utility and then run "patchadd" as root in single user mode with the patch number as an argument, e.g. "patchadd 108528"

Note:

After installing these patches, it will be necessary to re-install QFS on g0sas01. See PSR 914-TDA-231.

CM01AJA00 Revised 10/2/03   *ECS/EMD*